

REMARKS

Claims 1-24 are pending in this application. Claims 2, 4, 5, 7, 8, and 15-17 were previously canceled, and claims 1, 10-14, and 18-24 have been withdrawn, leaving claims 3, 6, and 9 remaining.

The amendments to the Specification, deleting a short sequence not essential to the inventive subject matter and extraneous text, do not introduce new matter within the meaning of 35 U.S.C. §132. Accordingly, entry of the amendments is respectfully requested.

Applicants take this opportunity to thank the Examiner for his helpful comments in the last Office Action, and for reconsidering and withdrawing the following rejections and objections based upon Applicants' Response and Amendment filed January 2, 2004: objection to claim 2 for informalities; rejection of claims 2-5 under 35 U.S.C. §101; rejection of claims 2-5 and 8-9 under 35 U.S.C. §112, second paragraph; rejection of claims 15-17 under 35 U.S.C. §112, first paragraph; rejection of claim 2 under 35 U.S.C. §102(a) as being anticipated by Song, et al. (SPTREMBL Accession No. Q9KJDO, 10-1-2000) and by Song, et al. (Enz. Microbial Technol., 2000, Vol. 27:212-218); rejection of claims 2 and 15 under 35 U.S.C. §102(b) as being anticipated by Tanaka, et al. (J. Biochem., 1983, Vol. 94(5):1569-1578), Tanaka, et al. (J. Biochem., 1985, Vol. 97(6):1679-88), and Nippon Oil Company (NIOC) (GenSeq database accession No. AAY04105, 6-10-1999); rejection of claims 16-17 under 35 U.S.C. §103(a) as being unpatentable over NIOC (GenBank

Accession No. AAY04105 6-10-1999) as applied to claim 15 above, and further in view of the common knowledge in the art of molecular biology.

1. Objections to the Amendment of the Specification

The Office Action objects to Applicants' request for an amendment, for the following reason:

"... for an amendment to be made at "page x" and "line y" which makes no sense has not been entered (see page 4 of the response). Correction and resubmission is required for the amendment to be considered and entered."

Applicants thank the Examiner for his comments. The proposed amendment has been re-submitted with the page and line designation, and entry of the amendment is respectfully requested.

2. Objections to the Drawings and to Sequence Compliance

A. The Office Action objects to the drawings because the "Legend to figure 3 continues to be represented without a SEQ ID NO. Correction is required."

Applicants thank the Examiner for his comments. The sequence in Figure 3 is SEQ ID NO: 5. A replacement Figure 3 is submitted herewith in order to so indicate, and to correct an error in Figure 3 as originally filed. The numbering for the nucleic acid sequence skips from the row numbered beginning with 451 to the next row, which should have been numbered beginning with 541 and instead was

numbered beginning with 631. This amendment conforms Figure 3 to SEQ ID NO: 5. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the objection to the drawings.

B. The Office Action objects to the Disclosure because of the following informalities:

"Applicants have filed "appendix to specification" comprising two attachments. Attachment 2 appears to be a replacement for "page 26". If this is so applicants need to make it clear that said filed attachment is replacement sheet for page 26. Appropriate correction is required."

Applicants thank the Examiner for his comments. It is unclear from the record whether the Preliminary Amendment in this matter was or was not entered. In the event that it has not been entered, an amendment directing the deletion of the text at page 26, line 17 is submitted in this Response. In the event that the Preliminary Amendment has been entered, the amendment directing the deletion of the text at page 26, line 17 is superfluous and should be disregarded. Applicants confirm that Attachment 2 to the Preliminary Amendment was a replacement for page 26 of the international application. Applicants understand that furnishing a replacement page is no longer accepted under 37 CFR 1.121, and thus submit the amendment in proper form in this Response.

C. The Office Action objects to Applicants compliance with the sequence requirements for the following reason:

"Applicant is required to comply with the sequence rules by inserting the sequence identification numbers of all sequences recited within the claims and/or specification. It is particularly noted that applicants do not provide SEQ ID NO to the sequence depicted in figure 3. Applicants have also filed an "an appendix to specification" with two attachments wherein attachment 1 comprises a sequence without any SEQ ID NO. See particularly 37 CFR 1.821(d)."

Applicants thank the Examiner for his comments. Applicants have previously amended the Specification and claims in numerous locations to insert "SEQ ID NO: ___" where appropriate, and have removed other non-essential sequences, such as primers, from the Specification in order to overcome this objection. As indicated above, Figure 3 is amended in to insert SEQ ID NO: 5. Applicants are uncertain if the Examiner believes that additional, unamended instances of sequences exist in the application.

Applicants have reviewed the Application and believe that Figure 3 was the only remaining instance of a sequence not designated by "SEQ ID NO: ___", and that the present amendment obviates this objection. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the objection to Applicants compliance with the sequence requirements. The Examiner is specifically invited to telephone the undersigned to arrange further corrections, if any are deemed necessary.

3. Priority

The Office Action states that acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). However, the priority document is in Korean. In order to perfect the priority date applicants need to submit an English translation of the priority document.

Applicants acknowledge the need to perfect the priority claim, and will file an English language translation under separate cover.

**4. Rejection of Claims 6 and 9 under 35 U.S.C. §112,
first paragraph**

The Office Action rejects claims 6 and 9 under 35 U.S.C. §112, first paragraph, for the following reasons:

Claims 6 and 9 are rejected as the invention appears to employ novel vector and bacterial strain. Since the vector and strain are essential to the claimed invention, they must be obtainable by a repeatable method set forth in the specification or otherwise be readily available to the public. The claimed plasmids' sequences are not fully disclosed, nor have all the sequences required for their construction been shown to be publicly known and freely available. The enablement requirements of 35 U.S.C. § 112 may be satisfied by a deposit of the plasmid/strain. The specification does not disclose a repeatable process to obtain the vectors and it is not apparent if the DNA sequences are readily available to the public. Accordingly, it is deemed that a deposit of these plasmids should have been made in accordance with 37 CFR 1.801-1.809.

It is noted that applicants have deposited the strain in a Korean Culture Collection, but there is no indication in the specification as to public availability. If the deposit was made under the terms of the Budapest Treaty, then an affidavit or declaration by applicants, or a

statement by an attorney of record over his or her signature and registration number, stating that the specific strain has been deposited under the Budapest Treaty and that the strain will be irrevocably and without restriction or condition released to the public upon the issuance of the patent, would satisfy the deposit requirement made herein.

Applicants thank the Examiner for his comments, and for his consideration in discussing this matter with Applicants' attorneys on April 15 and 21, 2004. Applicants had previously traversed the rejection because the Examiner has acknowledged that Applicants have deposited the strain in a Korean Culture Collection, and thus in compliance with the Budapest Treaty. Applicants' point, that the Receipt issued by that organization is *prima facie* evidence of full compliance with the Budapest Treaty, has not been rebutted, and no statute or regulation has been cited to Applicants' attorneys supporting the requirement imposed by the Examiner in this application. Applicants maintain that, lacking any reason of record for the Examiner to question the accuracy or legitimacy of the Receipt, this rejection must be withdrawn.

In order to advance prosecution, Applicants hereby affirm, through their attorney of record over his or her signature and registration number, as follows:

1. that the specific strain has been deposited under the Budapest Treaty; and

2. that the strain will be irrevocably and without restriction or condition released to the public upon the issuance of a patent.

Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection under 35 U.S.C. §112, first paragraph.

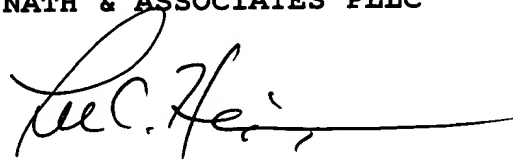
CONCLUSION

Based upon the above remarks, the presently claimed subject matter is believed to be clearly and distinctly claimed, fully enabled, novel, and patentably distinguishable over the prior art of record. The Examiner is therefore respectfully requested to reconsider and withdraw the rejections of remaining claims 3, 6, and 9, and allow all pending claims presented herein for reconsideration. Favorable action with an early allowance of the claims pending in this application is earnestly solicited.

The Examiner is welcomed to telephone the undersigned attorney if he has any questions or comments.

Respectfully submitted,

NATH & ASSOCIATES PLLC



Date: June 24, 2004

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